

A List of the Butterflies of Borneo, and Nymphalinae.

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Part II. .

SUB-FAM-NYMPHALINAE.

Genus *Ergolis*.

102. *Ergolis ariadne*, Joh.

Papilio ariadne, Johannsen, Amæn. Acad. vi. p. 407 (1764).

The typical form occurs in the Indian region, Siam, Malay Peninsula, Java, Borneo, the Lesser Sunda Is., Sumbawa Flores and Alor ; there are three sub-species occurring in Ceylon, Yunnan and Timor respectively.

103. *Ergolis specularia*, Fruhst.

Ergolis specularia, Fruhstorfer. Berl. ent. Zeitsch. Bd. XLIV p. 91 (1899).

In West-Java, South-Borneo and a sub-species in Alor and Sumbawa.

Messrs Pryer and Cator in the British North Borneo Herald Oct. 1894 pp. 259 and 260 describe two species of *Ergolis* as *Ergolis ahmat* and *Ergolis telok*, their descriptions are so brief and incomplete as to be quite useless for purposes of identification, and as the types of the species are now lost it would be as well to lose sight of the barbarous names as well. *E. ahmat* may possibly be a form of *E. merione* Cr.

Genus *Eurytela*.104. *Eurytela castelnaui*, Feld.*Eurytela castelnaui*, Felder. Wien. Ent. Monats. iv. p. 401 (1860).

Occurs also in Tenasserim, Malay Peninsula, Sumatra, Palawan with a sub-species in Nias.

The species is extremely rare in S. W. Borneo and Sarawak, though fairly common in British N. Borneo.

Genus *Euripus*.105. *Euripus halitherses*, Doubl. and Hew.*Euripus halitherses*, Doubleday and Hewitson Gen. D. Lep. vol. ii p. 293 pl. 41 fig. 2 (1848).Sub-sp. *E. halitherses borneensis*, Dist.

The typical form occurs in India, Assam and Burma, the sub-species *borneensis* is confined to Borneo, other sub-species occur in the Malay Peninsula, Sumatra, Java, Nias, Palawan and the Philippines. The different forms of the polymorphic female of this species have been given a great variety of names and the result is that the relationships between the different forms and between topomorphic varieties are much obscured. I believe that three fairly distinct female forms and three only can be recognised, viz. :—

1. A form mimicking both sexes of the species of the sub-genus *Danisepa*, to which the name *isa*, Moore may be applied; *alcatheoides*, de Nias *danisepa*. Fruhst, *pfeifferoides*. Fruhst. etc., are merely more or less well-marked varieties of this form; in Borneo or elsewhere this form is highly variable and no two specimens exhibit identically the same markings.
2. A form mimicking a *Euploea* such as *Penaea uniformis*, to which the name *uniformis*, Fruhst. may be applied;

the specimen figured by Moore in his *Lepidoptera Indica*. Plate 204 fig. 1, 1 a may be considered a typical example of this form.

3. A form mimicking species of the sub-genus *Trepsichrois*; the *nyctelius* of Doubleday and the *cinnamomens* of Wood-Major.

Form No. 2 seems to be intermediate between *isa* and *nyctelius* and I am sure that if a large number of these polymorphic females could be collected from a very wide area a graduated series between extreme forms of *isa* and of *nyctelius* could be constructed, unfortunately the females of this species are very rare and it will be long before this ideal can be attained; in the meantime to recognise in the distributional area of the species merely three female forms with distinctive names or numbers appears to be less confusing than to name indiscriminately every topomorph differing from closely related topomorphs in most trifling details.

Genus *Cupha*.

106. *Cupha crymanthis*, Drury.

Papilio crymanthis, Drury, Illust. Ent. i. pl. 15 fig. 3 and 4 (1770).

Sub-sp. *C. crymanthis lotis*, Sulz.

The species has a very extended distribution ranging from India and China to Celebes, Ké and Amboina and to the Philippines. The typical form is restricted to China, Formosa and Hainau.

107. *Cupha arias*, Feld.

Messaras arias, Felder, Reio. Nov. Lep. iii. p. 391 (1867).

In Mantanani Is. off the coast of N. Borneo, in Palawan and the Philippines; a sub-species occurs in Celebes.

Genus *Atella*.108. *Atella alcippe*, Cr.

Papilio alcippe, Cramer. Pap. Exot. iv. pl. 389 fig. 9 H. (1782).

Sub-sp. *A. alcippe alcippoides*, Moore.

The typical form is confined to the Moluccas; *alcippoides* occurs in Sikkim, Silhet, Khasia, S. India, Burma, Tenasserim, Andamans, Malay Peninsula, Borneo, Sumatra, Java; other sub-species are found in the Nicobars, Philippines, Palawan and Celebes.

109. *Atella sinha*, Kollar.

Terinos sinha, Kollar, Higel's Reis. Kasch. iv. pt. 2, p. 438 (1844).

Occurs in India, Burma, Assam, Tenasserim, Malay Peninsula, Great Sunda Is., Philippines, Celebes.

Genus *Cethosia*.110. *Cethosia hypsea*, Doubt.

Cethosia hypsea, Doubleday and Hewitson, Gen. D. Lep. pl. 20 f. 4 (1847).

The typical form is confined to Borneo, but sub-species are found in the Malay Peninsula, Sumatra, Java, Billiton, Palawan, Balabac, and the Philippines.

[The larva has the dorsal half of the body red, the ventral half black, with the exception of the seventh segment which is entirely creamy white. Like many other members of the genus the larva is gregarious; it bears a close resemblance to the larva of a day-flying moth *Hypsa* sp. which is also gregarious. Mr. H. N. Ridley, Director of the Singapore Botanic Gardens found a number of the Hypsid larvae grouped

closely and symmetrically around the end of a flower-stalk, the group looking like a large conspicuous fruit. The pupa of *Cethosia hypsea* is at first pure white with a few brown and yellow blotches, but it gradually becomes a pale brown. The adult is one of the commonest butterflies in Borneo and I have no doubt that it is a very distasteful species ; when on the wing it is not at all unlike the widespread *Limnas chrysippus* and it may be considered as an "incipient mimic" of that species.]

111. *Cethosia biblis*, Drury.

Papilio biblis, Drury, 111 Exot. Ent. I Pl. 4. f. 2 (1773).

Sub-sp. *C. biblis sandakana*, Fruhst.

The species occurs in Sikkim, Assam, Burma, Tenasserim, Indo-China, Nicobars, Andamans, Malay Peninsula, Java, Borneo, Philippines, Moluccas. The sub-species *sandakana* is confined to N. Borneo.

Genus *Terinos*.

112. *Terinos clarissa*, Boisd.

Terinos clarissa, Boisdewal, Spèc. Gen. Lep. i. pl. 9, fig. 4 (1836).

Occurs in Upper Tenasserim, Malay Peninsula, Singapore, Borneo, Java.

113. *Terinos fulminans*, Butl.

Terinos fulminans, Butler, Cist. Ent. i. p. 9 (1869).

Confined to Borneo.

114. *Terinos tenthras*, Hew.

Terinos tenthras, Hewitson, P. Z. S. 1862 p. 89.

There is a specimen of this species in the Sarawak Museum from Simanggang, Batang Lutar River. Sarawak

and this constitutes the first record of the species occurring in Borneo; it is also found in the Malay Peninsula and Singapore.

Terinos terpander, Hew. (*syu. T. nympha*, Wall.) seems to have been wrongly recorded from Borneo, the species is confined to Sumatra.

Genus *Cynthia*.

115. *Cynthia erota*, Fab.

Papilio erota, *Fabricius*, Ent. Syst. III. 1 p. 76 (1793)

Sub-sp. *C. erota erotella*, Butl.

This sub-species is found in the Malay Peninsula, Borneo, Natunas, Banka and Billiton; a female from Mr. Kina Balu is distinguished by Fruhstorfer as an aberration to which he gives the name *montana*. The exact range of the species is rather uncertain, but if Fruhstorfer's grouping of the various forms is correct (Iris 1899 p. 84) the species range from the Indian region to the Philippines and to Celebes and the Moluccas.

Genus *Eulaceura*.

116. *Eulaceura osteria*, Westw.

Apatura osteria, Westwood, Gen. D. Lep. p. 305 (1850).

From Tenasserim, Malay Peninsula, Singapore, Java, Borneo.

Genus *Herona*.

117. *Herona Schönbergi*, Staud.

Herona schönbergi, Staudinger, Iris. 1890 p. 337, pl. 3 f. 3.
Confined to Borneo.

Genus *Precis*.118. *Precis iphita*, Cr.

Papilio iphita, Cramer, Pap. Exot. III t. 209. C. D. (1782).

Precis neglecta, Swinhoe, A. M. N. H. (7) vol. 3. p. 103 (1899).

Sub-sp. *P. iphita osca*, Fruhst.

This sub-species is restricted to Sumatra and Borneo other forms are found in China, India, Burma, Java, lesser Sunda Is. Malay Peninsula, Palawan.

The splitting up of this and other species of the genus into sub-species cannot be regarded as altogether satisfactory. The wonderful results obtained by G. A. K. Marshall (of Trans. Ent. Soc. Lond.) from his breeding experiments with African species of *Precis* afford convincing proof of the extraordinary plasticity of the species of this genus and until similar experiments are conducted with the Indo-Malayan species we can have no worthy evidence of the constancy of the sub-specific or geographical forms distinguished by Fruhstorfer (Berl. Ent. Zeitsch. XLV p. 22. 1900).

Precis neglecta Swinhoe appear to be nothing but an aberration or seasonal phase of *P. iphita* and in our present state of ignorance I have no hesitation in sinking the name as a synonym.

119. *Precis hedonia*, L.

Papilio hedonia, Linnaeus, Mus. Olr. p. 279 (1764).

Sub-sp. *P. hedonia ida* Cr.

This form occurs in the Malay Peninsula, Great and Lesser Sunda Is. Philippines, Palawan, Sumba, Flores. Other forms occur in Celebes, Moluccas, New Guinea and Australia.

Genus *Junonia*.120. *Junonia atlites*, L.*Papilio atlites*, Linnaeus, Cat. Ms. p. 24 (1763).

Indian region, Nicobars, Malay Peninsula, Hainan Great Sunda Is., Nias.

121. *Junonia almana*, L.*Papilio almana*, Linnaeus, Syst. Nat. x. ed. p. 472 (1758).

From Indian region, Andamans and Nicobars, Malay Peninsula, China, Formosa, Japan, Philippines Great Sunda Is. and Lesser Sunda Is.

The wet season form *J. asterei*, L. alone occurs in Borneo where it is extremely rare, Pryer and Cator record one specimen from N. Borneo.122. *Junonia orithya*, L.*Papilio orithya*, Linnaeus, Syst. Nat. ed. x. p. 473 (1758).Sub-sp. *J. orithya wallacei*, Dist.

The species ranges from India and China right down to Australia. Fruhstorfer recognizes nine geographical races.

GENUS NEPTIS.

Sect. *Rahinda*.123. *Neptis hordonia*, Stdl.*Papilio hordonia*, Stdl, Cramer's Pap. Exot. V pl. 33, fig. 4. 4. D (1791).

Occurs in India, Assam, Burma, Tenasserim, Siam, Malay Peninsula and the Sunda Is.

124. *Neptis dindinga*, Butl.

Neptis dindinga, Butler, Trans. Linn. Soc. (II) i. p. 542, pl. 68, fig. 6. (1879).

From Burma, Tenasserim, Malay Peninsula, Borneo.

125. *Neptis paraka*, Butl.

Neptis paraka, Butler, Trans. Linn. Soc. (II) i. p. 542, pl. 68, fig. 2. (1879).

From Assam, Burma, Tenasserim, Malay Peninsula, Great Sunda Is, Nias and Mergui Archipelago.

126. *Neptis aurelia*, Staud.

Neptis aurelia, Staudinger, Exot. Schmett. p. 145 (1886).

From Burma, Tenasserim, Malay Peninsula, Borneo, Sumatra.

127. *Neptis Sandaka*, Butl.

Rahinda Sandaka, Butler. P. Z. S. 1892, p. 120.

Confined to Borneo.

This may be merely an aberration of *N. paraka*, Butl.

Sect. *Lasippa*.128. *Neptis heliodore*, Fab.

Papilio heliodore, Fabricius, Ent. Syst. III. i. p. 130 (1793).

Occurs in Lower Burma, Tenasserim, Siam, Malay Peninsula, Sumatra, Java, Borneo.

The males of this species are extremely rare.

129. *Neptis siaka*, Moore.

Neptis siaka, Moore, Trans. Ent. Soc. Lond. 1881 p. 311.

From Sumatra, Nias and Borneo.

Sect. *Stabrobates*.130. *Neptis miah*, Moore.*Neptis miah*, Moore, Cat. Lep. Mus. E.I.C. i. p. 164, pl. 4a fig. 1 (1857).Subsp. *N. miah batara*, Moore.

The species occurs in India, China, Burma, Siam, Malay Peninsula, and the great Sunda Is. The sub-species *batara* occurs in the Malay Peninsula, Sumatra and Borneo.

Sect. *Bimbisara*.131. *Neptis harita*, Moore.*Neptis harita*, Moore, P. Z. S. 1874, p. 571 pl. 66. f. 8.

Occurs in India, Assam, Burma, Tenasserim, Malay Peninsula, Borneo.

This may be only a sub-species of *N. vikasi*, Horst.

132. *Neptis anjana*, Moore.*Neptis anjana*, Moore, Trans. Ent. Soc. 1881, p. 309.

Occurs in Burma, Tenasserim, Malay Peninsula, Sumatra, Borneo, Nias.

133. *Neptis omeroda*, Moore.*Neptis omeroda* Moore, P. Z. S. 1874 p. 571.

Occurs in Penang, Singapore, Sumatra, Borneo.

The species appears to be extremely closely allied to *N. harita* and *N. vikasi*.

Sect. *Pandassana*.134. *Neptis fuliginosa*, Moore.*Neptis fuliginosa*, Moore, Trans. Ent. Soc. Lond. 1881. p. 31.

Occurs in Lower Burma, Tenasserim, Sumatra and Borneo.

135. *Neptis leucothoë*, L.

Papilio leucothoë Linnæus, Mus. Ubr. p. 292 (1764).

Subsp. *N. leucothoë matuta*, Hübn.

The following table must be regarded merely as a provisional arrangement :—

Neptis leucothoë L. forma typica—China, Formosa.

„	„	astola, Moore. Himalayas, Khasias, U. Burma.
„	„	varmona, Moore. India, Sikkim, Ceylon.
„	„	andamana, Moore. Andamans.
„	„	nicobarica, Moore. Nicobars.
„	„	adara, Moore. Burma, Tenasserim, Malay Peninsula, Sumatra.
„	„	matuta, Hübn. Java, Borneo.

136. *Neptis susruta*, Moore.

Neptis susruta, Moore, P. Z. S. 1872, p. 563, pl. 32, fig. 4.

India, Sikkim, Burma, Tenasserim, Malay Peninsula, Sumatra, Borneo.

137. *Neptis nata*, Moore.

Neptis nata, Moore, Cat. Lep. Mus. E. I. C. i. p. 168, pl. 4a, fig. 6 (1857).

From Burma, Tenasserim, Malay Peninsula, Nias and the Great Sunda Is.

Messrs. Pryer and Cator describe a species of *Neptis* as *Neptis fulva* (British N. Borneo Herald p. 260 1894); Moore regards this as a synonym of *Neptis nata* (Lep. Ind. vol. iii. p. 243) *Neptis Kechil* Pryer and Cator is

probably an aberration of the same species, the description is hopelessly inadequate and the type of the species is lost.

Sect. *Andrapana*.

138. *Nepis duryodana*, Moore.

Nepis duryodana, Moore, P. Z. S. 1858, p. 10, pl. 49, fig. 8.

From Borneo and Sumatra with possibly some subspecies in Java and the Malay Peninsula.

Moore gives *Nepis basilla*, Pryer and Cator as a synonym.

Genus *Cirrochroa*.

139. *Cirrochroa bajadeta*, Moore.

Cirrochroa bajadeta, Moore, Cat. Lep. Mus. E. I. C. i. p. 150, pl. 3a fig. 3, 3a (185).

Cirrochroa ravana, Moore. l. c. p. 150 (185).

Occurs in the Malay Peninsula, Java and Borneo.

[A wonderful flight of this species occurred at Kuching and Sadong, Sarawak on the 12th of January 1903; a short account of it was published in this journal No. 39 p. 203].

340. *Cirrochroa mithila*, Moore.

Cirrochroa mithila, Moore, P. Z. S. 1872 p. 558.

Subsp. *C. mithila rotundata*, Butl.

Occurs in Sikkim, Assam, Bengal, Tenasserim, Burma, Malay Peninsula and Great Sunda Is. *Rotundata* differs from the typical form in being more heavily marked especially at the apex of the forewing above, in Bornean males the discal fascia on the underside is narrower, and in the females it is rather differently shaped and on the hind-wing narrower than in the Indian forms. It

is quite possible that the Bornean race is sub-specifically distinct from the other Malayan races, in which case it will require another name.

141. *Cirrochroa calypso*, Wall.

Cirrochroa calypso, Wallace, Trans. Ent. Soc. Lond. 1869
5 p. 339.

The species is confined to Borneo.

142. *Cirrochroa malaya*, Feld.

Cirrochroa malaya, Felder, Wien. Ent. Monats. iv. p. 399
(1860).

Sub-sp. *C. malaya baluna*, Fruhst.

From the Malay Peninsula, Sumatra and Borneo ; the Natunas Is. race is distinguished as *natuna* Fruhst.

143. *Cirrochroa satellitia*, Butl.

Cirrochroa satellitia, Butler, Astula Entom. i. p. 9.
(1869).

Hong-kong, Malay Peninsula, Borneo.

144. *Cirrochroa orissa*, Feld.

Cirrochroa orissa, Felder, Wien. Ent. Monats. iv. p. 399
(1860).

From the Malay Peninsula, Sumatra and Borneo.

[In Borneo at any rate this is a characteristically mountain species.]

Genus *Dugapa*.

145. *Ducapa fasciata*, Feld.

Atella fasciata, Felder, Wien. Ent. Monats. iv. p. 236
(1860).

From Tenasserim, Malay Peninsula and Great Sunda Is. Philippines, Palawan.

Genus *Stibochiana*.

146. *Stibochiana schönbergi*, Honr.

Stibochiana schönbergi, Honrath, Berl. Ent. Zent. 1889, p. 165, pl. 2, fig. 4.

Stibochiana persephone, Staudinger, Iris, 1892, p. 451.
From Mr. Kina Balu and Matang, Borneo.

Genus *Hypolimnas*.

147. *Hypolimnas bolina*, L.

Papilio bolina, Linnæus, Syst. Nat. x. ed. p. 479 (1758).

Ranges through the Indian region and China, the Malay Peninsula and the Philippines, through the Malay Archipelago and Australia and the South Sea Islands. The females are extraordinarily variable and it does not seem possible as yet to divide them up into constant local races. The female form most frequently met with in N. Borneo is dark fuscous above with a subapical blue-white fascia on the forewings, one specimen from N. Borneo in the Sarawak Museum however, has a tinge of red near the exterior angle of the forewing, whilst a specimen from Kuching has a large red patch near the external angle of the forewing and a discal white patch on the hind-wing. The species is rare in Sarawak, though quite common in N. Borneo.

148. *Hypolimnas misippus*, L.

Papilio misippus, Linnæus, Mus. Ubr. p. 264 (1764)

Africa, India to Malay Peninsula, China and Formosa Great and Lesser Sunda Is.

I have not yet met with the species in Sarawak.

149. *Hypolimnas anomala*, Wall.

Diadema anomala, Wallace, Trans. Ent. Soc. Lond. 1869,
p. 285.

Malay Peninsula, Great Sunda Is. Nias, Amboina,
Philippines.

[The female is a close mimic of *Euploea clandius mulciber* ♂, some males have also a blue gloss on the forewings and then mimic *E. clandius mulciber* ♂, others have no blue gloss and mimic *Euploea crameri*. The species has the flaunting flight so typical of the Danainae. It seems very likely that this wide-spread genus is a protected one and that the mimicry of Danaines by the various species is Müllerian mimicry as opposed to Batesian.]

Genus *Dichorragia*.150. *Dichorragia nesimachus*, Boisd.

Adolias nesimachus, Boisduval, Cur. Rég. Anim. ms. ii. pl. 139, bis, fig. 1 (1836).

Sub-sp. *D. nesimachus mancus*, Fruhst.

The typical form occurs in India, Burma, Malay Peninsula, the sub-species *mancus* in Java, Sumatra and Borneo and a third form in Celebes.

Genus *Parthenos*.151. *Parthenos sylvia*, Cr.

Papilio sylvia, Cramer, Pap. Exot. i. pl. 43 figs. F. G. (1776).

Sub-sp. *P. sylvia borneensis* Staud (*nella* Suruh, syn.)

This sub-species is confined to Borneo. Fruhstorfer divides the species into no less than twenty-four local races ranging through India to China and the Philippines and down the Malay Archipelago to New Guinea.

Genus *Lebadea*.152. *Lebadea martha*, Fab.

Papilio martha, Fabricius Mant. Ins. ii. p. 56 (1787).

The Sarawak Museum collection contains a male of this species from Satap, Sarawak which is quite indistinguishable from Burmese males of the wet-season brood. Fruhstorfer divides the species into eight races with one aberration from Burma, Assam, Sikkim, Indo-China, Malay Peninsula, Natunas, Great Sunda Is., and Palawan. *Lebadea martha paduka*, Moore from Borneo I prefer however to regard as a distinct species, in spite of the fact that the Malay Peninsula race serves partly to bridge the gap between it and the typical form from Burma etc. ; the occurrence side by side in a limited area of two sub-species appears to me quite incredible.

153. *Lebadea paduka*, Moore.

Limenitis paduka, Moore, Cat. Lep. Mus. E.I.C., i. p. 179 (1857).

Borneo and Palawan (? only).

Genus *Pandita*.154. *Pandita sinope*, Moore.

Pandita sinope, Moore, Cat. Lep. Mus. E.I.C., i. p. 181 pl. 6a, fig. 3 (1857).

Sub-sp. *P. sinope sinoria*, Feld.

This sub-species occurs in Borneo, others in Malay Peninsula, Java, Sumatra, Billiton, Banca, Nias.

Genus *Limenitis*.155. *Limenitis procris*, Cr.

Papilio procris, Cramer, Pap. Exot. ii. pl. 106, fig. E. F. (1777).

Sub-sp. *L. procris agnata*, Fruhst.

The species occurs in India, Ceylon, Burma, S. Andamans, Malay Peninsula, Great and Lesser Sunda Is. Flores and Palawan; the sub-species *agnata* is confined to the Malay Peninsula, Sumatra and Borneo.

156. *Limenitis daraxa*, D. and H.

Limenitis daraxa, Doubleday and Hewitson, Gen. D. Lep. ii. p. 276 pl. 34. fig. 4. (1850).

Sub-sp. *L. daraxa viridicans*, Fruhst.

India, Assam, Burma, Tenasserim, Malay Peninsula and Borneo.

The sub-species *viridicans* is only found on the mountains of Borneo.

Genus *Athyma*.

157. *Athyma larymna*, D. and H.

Limenitis larymna, Doubleday and Hewitson, Gen. D. Lep. ii. pl. 35, fig. 1. (1850).

Sub-sp. *A. larymna elisa* Fruhst.

The sub-species is found in Borneo, Malacca, Tenasserim and Sumatra, other races in Java, Palawan and Nias.

158. *Athyma idita*, Moore.

Athyma idita, Moore, P. Z. S. 1858, p. 16, pl. 51, fig. 3.

From the Mergui Archipelago, Malay Peninsula and Great Sunda Is.

159. *Athyma kanwa*, Moore.

Athyma kanwa, Moore, P. Z. S. 1858, p. 17. pl. 51, fig. 2.

From Burma, Assam, Malay Peninsula, Sumatra, Nias, Borneo.

160. *Athyma pravara*, Moore.

Athyma pravara, Moore, Cat. Lep. Mus. E. I. C. i. p. 173
pl. 50, fig. 4 (1857).

From Assam, Burma, Tenasserim, Malay Peninsula,
Great Sunda Is. Banca Nias.

161. *Athyma kresna*, Moore.

Athyma kresna, Moore, P. Z. S. 1858, p. 12. pl. 50, fig. 4.
Athyma subrata, Moore, l. c. p. 13, pl. 51, fig. 1.

Occurs in India to the Malay Peninsula, Mergui
Archipelago, Sumatra and Borneo.

Fruhstorfer regards *A. subrata*, Moore as a local race
of *A. nefte*, Cr. but this is certainly not so; *A. subrata* is
the female of *A. kresna*. [The female is a close mimic
of *Neptis harita*, Moore; it is extremely rare].

162 *Athyma nefte*, Cr.

Papilio nefte, Cramer, Pap. Exot. iii. pl. 256, fig. E F,
(1782).

Sub-sp. *A. nefte nivifera*, Butl.

The typical form is confined to Java, the sub-species is
found in Tenasserim, the Malay Peninsula, S. Borneo,
Java, Sumatra.

163. *Athyma ambara*, Druce.

Athyma ambara, Druce. P. Z. S. 1873, p. 344, pl. 32 fig. 2.

The typical form is confined to Borneo; there is a
sub-species *ambarina* in the Malay Peninsula and Suma-
tra.

164. *Athyma cama*, Moore.

Athyma cama, Moore, Cat. Lep. Mus. E. I. C. i. p. 174,
pl. 5a, fig. 5. (1857).

Sub-sp. A. *cama ambra*, Staud.

The typical form occurs in India (Himalayas) Assam, Burma, the sub-species on Mr. Kina Balu, N. Borneo.

165. *Athyma abiasa*, Moore.

Athyma abiasa, Moore, P. Z. S. 1858, p. 16, pl. 50, fig. 7.

Occurs in Malay Peninsula, Mergui Archipelago, Nias and Great Sunda Is.

The species is very variable in size and in markings : mountain specimens in Borneo are considerably larger as a general rule than low country forms, but there appear to be no other characters of the least constancy to justify a separation of the species into two distinct races.

166. *Athyma euloca*, Sp. n.

♂ *Upperside* : Dark fuscous with the following markings :—on the *forewings*, a short narrow line in the cell, a triangular spot at the end of the cell, three subapical spots placed obliquely outwards, two discal spots, the upper large and situated in the second median interspace, the lower small and devided by the sub-median nervure, a sub-marginal series of six small spots, white ; a powdering of green scales at base of cell and between the discoidal streak and outer triangular spot ; on the *hindwings* the discal band is much reduced consisting of two white spots and of a greenish grey suffusion in the sub-median interspace, there is a double sub-marginal series of spots which become obsolete towards the external angle of the wing, the inner spots are pale fuscous, the outer are pale fuscous but becoming greenish and larger towards the anal angle. The dorsum of the first abdominal segment is covered with greenish-grey hairs.

Underside. Olive, brown ; on the *forewings* the markings are much the same as on the upperside, but the

cell has a whitish streak closing it and two transverse brown lines between the discoidal streak and outer spot ; the sub-marginal series of spots is indistinctly doubled and suffused slightly with violaceous ; on the *hind-wings* the abdominal margin and greenish, there is a whitish mark below the pre-costal nervure, the discal band is still more reduced than on the upperside, the inner sub-marginal series is whitish and with internervular obsolete dashes, brown in colour passing from it inwards, the outer series is violaceous.

Body and legs beneath greenish.

Expanse, 51 mm. *Hab.* Mt. Matang, 3200,' Sarawak (June). Type and only known specimen in the Sarawak Museum. The species is remarkable for the great reduction of the white markings on the upperside.

[A little detail in the markings on the upperside of species of the genus *Athymae* seems to have hitherto escaped notice. In nearly all the species—*A. scelenophora*, Koll. and *A. zeroa*, Moore are exceptions,—the transverse discal white band of one hind-wing is continuous with the corresponding band of the other wing by means of a patch of white hair covering the dorsum of the first abdominal segment ; in the males of *A. scelenophora* and *A. zeroa* the discal bands are broader and are more oblique and so touch the abdominal margin of the wing at a lower level than they do in such a species as *A. kresna*, Moore, and we find that the band of one wing is not connected through an abdominal tuft of white hair with the other band ; in these details of markings at any rate these two species approach the genus *Limenitis* but it is interesting to note that the females have these discal bands more transverse and connected one with the other across the abdomen in the manner so characteristic of other *othymae*. The species of the genus *Neptis* which serve as models to so many mimicking *Athymae* in no case known to me have the discal bands of the hind-wings connected by an abdominal patch, even

though these bands in many species are quite as transverse as in characteristic *Athymae*. The presence of a tuft of white hairs on the dorsum of the first abdominal segment, forming a connection between the discal band one of hind-wing and that of the other wing is then quite an important character of the genus *Athymae*, it is present in a modified form in *A. euloca*, milsi. in correlation with the obsolescent discal bands of that species].

Genus *Adolias*.

167. *Adolias dirtea*, Fab.

Papilio dirtea, Fabricius, Ent. Syst. iii. pt. 1, p. 59 (1793).

The typical form occurs in the Indian region, Malay Peninsula, Sumatra, Borneo, Natunas, Banka and Billiton, sub-species occur in Indo-China, Hainan, Assam, Sikkim, Java and Philippines. Fruhstorfer names a form occurring on mountains in Sumatra and Borneo :—ab. *montana*, Hagen.

168. *Adolias cyanipardus*, Butl.

Symphaedra cyanipardus, Butler, P. Z. S. 1868, p. 613.

Sub-sp. *A. cyanipardus sandakanus*, Fruhst.

The sub-species occurs in Borneo and doubtfully in Sumatra; the typical form is found in Assam, Silhat and Cachar, and a second sub-species occurs in Banca.

169. *Adolias canescens*, Butl.

Symphaedra canescens, Butler, P. Z. S. 1868, p. 612 pl. 45, fig. 5.

Borneo. A sub-species is found in the Malay Peninsula and Sumatra.

Genus *Euthalia*.Sub-genus *Bassarona*

170. *Euthalia (Bassarona) bellata*, Druce.

Adolias bellata, Druce. P. Z. S. 1873, p. 344, pl. 32,
fig. 3.

The typical form is confined to Borneo, sub-species occur Tenasserim, Malay Peninsula, Sumatra, Nias and Java.

Sub-genus *us Rangasa*.

171. *Enthalia Rangasa dunya*, D. & H.

Adolias dunya, Doubleday and Hewitson, Gen. D. Lep. ii.
p. 291, pl. 44, fig. 3 (1850).

Tenasserim, Malay Peninsula, Great Sunda Is., with a sub-species in Nias.

Sub-genus *Cognitia*.

This sub-genus is in the greatest confusion and a recent paper by Fruhstorfer (Berl. Ent. Zeitschr. XLIV. pp. 121—155 1899) has not cleared matters up very much; in fact until the opposite sexes of several of the species have been taken in coitū, the numerous types compared and the genital armature of the males dissected out no satisfactory revision of the sub-genus can be made.

From Borneo seven species have been recorded :—

1. *Euthalia ambalika*, Moore.
2. " *vacillaria*, Butl.
3. " *diardi*, Voll.
4. " *asoka*, Feld.
5. " *magnolia*, Stand.
6. " *gopiu*, Moore.
7. " *gandava*, Voll.

The habitat of the last two species is extremely doubtful, in fact the only locality quoted for *E. gandava* is "0,072 meter," *E. gopia* may possibly be from the Malay Peninsula. *E. magnolia* is a Kina Balu species and *E. asoko*, Feld. has been wrongly recorded from Borneo as it has been confused with *E. vacillaria*. The remaining three species are found in Sarawak; specimens of all three have been taken at various times of the year at and around Kuching and in my opinion the species can be readily distinguished one from the other.

Examples of both sexes of the three species have been sent to the late Mr. L. de Nicéville, to Herr Fruhsstorfer and have been compared with specimens in the British Museum (Natural History) named and as arranged by Dr. A. L. Butler; although I have not invariably found myself in accord with the opinions of these distinguished lepidopterists I am none the less deeply indebted to them for their valuable information and I have not found it impossible to reconcile their rather diverse opinions with what I consider to be the facts of the case.

Euthalia vacillaria, Butl. was described in 1868 from a female only, the male has never been described although male specimens agreeing exactly with male specimens in the Sarawak Museum collection stand under the name *vacillaria* in the British Museum collection. A description of the male follows:—*Upperside*—Very like the male of *Euthalia ambalika*, Moore, but the apex of the forewing is distinctly falcate, the pale blue fascia of the forewing is narrow and ends, as a rule, just below the lowest sub-costal nervule, on the hind-wing above, below the costal nervure is a large patch of black androconial scales, *Underside*, dull brown ochreous, the margin of the forewing from just below the apex to the second median nervule lilacine grey—Expanse 60 mm.

The falcate forewing and the large patch of androconial scales are the salient features of this species. This

species may perhaps be only a sub-species of *E. gsoka*, Feld. from the Malay Peninsula but for the present it will be advisable to keep the two forms separate.

Euthalia ambalika, Moore was described in 1859 from a female and nine years later a male described by Butler * was associated with this female but this male is really the male of *E. diardi*. On Mt. Penrisen in 1898 I observed an undoubted female *ambalika* with a male hovering round her and following her from one resting-place to another, fortunately I was able to secure both specimens and I have no doubt that they are the opposite sexes of the same species. The male differs from the male of *E. vacillaria* in the following points:—The apex of the forewing is not falcate; the blue border of the forewings extends to near the apex of the wing and internally it is deeply but narrowly notched; the patch of androconial scales is small or absent; the colour of the underside is bright ochreous. The male is very variable in size and rather variable in colouration, the blue band of the upperside often being tinged with lilac and the underside is sometimes rather sullied the markings sometimes being clear sometimes obsolete. The female has no blue band on the upperside of the hind-wings. *E. ambalika* is possibly a sub-species of *E. puseda*, Moore from the Malay Peninsula, *E. blumei* Voll. from Java being another.

Euthalia diardi, Voll. was described in 1862 from a female. The male is to be distinguished from the corresponding sex of *E. ambalika* by the following points:—the blue fascia of the forewing is broad and extends to the apex of the wing; the blue fascia on the hind-wing is very broad; the androconial scales are reddish brown; the underside is *not* bright ochreous

* Herr Frühstorfer informs me that a specimen of what I consider to be the true male of *E. ambalika* is identical with the co-Type of *E. diardi* in his collection.

but dull brown shaded with blacine near the apex of the forewing and on the sub-discal area of the hind-wing. The female is readily distinguished by a broad band of blue on the hind-wing. The species is probably merely a local race of *E. coccytina*, Horsf. from Sumatra.

172. *Euthalia cynitia vacillaria*, Butl.

Adolias vacillaria, Butler, P. Z. S. 1868, p. 606, pl. 45,
fig. 1.
Borneo.

173. *Euthalia cynitia ambalika*, Moore.

Adolias ambalika, Moore, Trans. Ent. Soc. 1859, p. 74,
pl. 5, fig. 3.
Borneo.

174. *Euthalia cynitia diardi*, Voll.

Adolias diardi, Vollenhoven, Tijd. Ent. 1862, p. 18²,
pl. 10, fig. 2.
Borneo.

175. *Euthalia cynitia magnolia*, Staud.

Euthalia magnolia, Staudinger, Iris 1896 p. 235, pl. V.
fig. 5.
From Kina Balu, North Borneo.

176. *Euthalia gopia*, Moore and *Euthalia gandava*, Voll. I do not include in this list for lack of proper evidence of the provenance of the species.

Sub-genus *Tasinga*.

177. *Euthalia Tasinga anosia*, Moore.

Adolias anosia, Moore, Cat. Lep. Mus. E. I. C. i. p. 187,
(1857).

R. A. Soc., No. 45, 1905.

Found in Sikkim, Assam, Tenasserim, Burma, Malay Peninsula, Great Sunda Is., Bali, Banka.

Sub-genus *Dophla*.

178. *Euthalia (Dophla) evelina*, Stoll.

Papilio evelina, Stoll, Cramer, Pap. Exot. V, p. 132, pl. 28, figs. 2, 2B.

Sub-sp. *E. evelina compta*, Fruhst.

Fruhstorfer divides the species into 11 races ranging through India to Indo-China and the Malay Peninsula, the Great Sunda Is., Nias, Philippines and Celebes. The sub-species *compta* occurs in Burma, Tenasserim, Malay Peninsula, Sumatra and Borneo.

[The species is very partial to rotten fruit and I have caught many specimens in mosquito-netting traps baited with this butterfly delicacy.]

Sub-genus *Nora*.

The naturalist who attempts to clear up the confusion in which this sub-genus is shrouded will have no easy task to accomplish. In the past, species were described from single male and female specimens in the most reckless manner, whilst more modern authors appear to have shirked a careful revision of the group yet have not refrained from adding to the number of species in it, and the result is—chaos. For my own part I can do no more than give an annotated list of the species found in Borneo ; still, such local lists are the necessary preliminaries to an accurate revision of the entire group. It may be remarked *en passant* that many of the characters whereby the sub-genus *Nora* can be distinguished from *Euthalia* in its restricted sense are rather obscure e.g. the patch of glandular scales on the hind-wing of the male is very variable and it occurs moreover in many species of *Euthalia* ; in the absence of the

female sex of a species, it is often difficult to state whether that species should be referred to the sub-genus *Nora* or not, the pattern on the underside of the wings is perhaps as good a character as any other.

179. *Euthalia (Nora) ramada*, Moore.

Adolias ramada, Moore, Trans. Ent. Soc. London, 1859, p. 69, pl. 4, fig. 5.

Sub-sp. *E. ramada surjas*, Vollenh.

There is no constant or essential difference between *E. surjas*, Vollenh., and *E. limbata*, Fruhst. (Berl. Ent. Zeitschr. XLIV. p. 140 1898). I have Herr. Fruhstorfer's authority for regarding *E. limbata* (i.e. *E. surjas* as a sub-species of *E. ramada*). The typical form comes from Malacca the sub-species seems to be confined to Borneo. The female of this species has yet to be determined with certainty Dr. Butler considers A. M. N. H. (7) vol. viii. p. 356 1901) that the female of *E. indras*, Vollenh is undoubtedly the female of *E. ramada*, whereas Herr. Fruhstorfer (l.c. p. 124 regards it as the female of *E. bipunctata*, Vollenh. Either authority may be right for the females of the species of *Nora* are most remarkably similar, but any opinions as to the correct pairing of the various species must be pure guess work until the respective sexes are actually captured in coitū. For reasons stated below I do not consider it at present advisable to sink the name *E. indras*, Vollenh. as a synonym of any other species.

180. *Euthalia (Nora) laverna*, Butl.

Adolias laverna, Butler, Cist. Ent. i. p. 29. (1870) ♀ ; Lep. Exot. p. 174, pl. 60, fig. 5 (1874) ♂.

Euthalia lavernalis, de Nicéville, Journ. Bombay N. H. Soc. 1893, p. 45.

From Borneo and the Malay Peninsula.

Butler now regards (A. M. N. H. (7) vol. viii. p. 357' 1901) his type female as equivalent to *E. somadeva*, Feld. a species described in 1867 from a single female specimen said to come from N. India and the male of Felder's species he considers to be *E. cordelia*, Fruhst. even though Fruhstorfer has described that species from both male and female specimens. Moore (Lep. Ind. vol. iii. p. 110) considers both the male and female of *E. laverna* Butl. to be the same as *E. somadeva*, Feld. All this is the purest guess work and for the present I prefer to let Butler's name stand and to exclude *E. somadeva* from the Bornean fauna until further evidence of its habitat is forthcoming. So far as I know Butler having relegated to *E. somadeva* his type ♀ *laverna* has not described what he considers to be the true ♀ of the species.

In Northern Borneo, the bluish-green colour on the upperside of the hind-wings in the males becomes replaced by violaceous and the hind-wings of the females also become slightly tinged with this shade, whereas in South country females the hind-wings are brown; it is interesting to note that in the genus *Tanacia* there is a similar tendency towards a violet colouration of the hind-wings in species from Northern Borneo, Southern forms being more or less unicolorous.

181. *Euthalia (Nora) Cordelia*, Fruhst.

Nora cordelia, Fruhstorfer, Berl. Ent. Zeitschr. XLIV. p. 121, (1899).

Confined to Borneo.

This species with its aberration *ilka* from Kina Balu is very close, perhaps too close to the preceding species, but it occurs in the same area with it and is constantly different from it though only slightly.

182. *Enthalia (Nora) indras*, Vollenh.

Adolias indras, Vollenhoven, Tijd. Ent. p. 194, pl. 11, fig. 2, (1862).

Confined to Borneo.

The species was described from a female specimen, which as already stated has subsequently been associated with *E. ramada*, Moore by Butler and with *E. bipunctata*, Vollenh. by Fruhstorfer. Here occurs in Borneo however a species, represented in the Sarawak Museum by a series of seven male specimens for which no name can be found ; the species is allied to *E. laverna* but is abundantly distinct from it and in conjunction with the late Mr. de Nicéville I regard this as the male of Vollenhoven's species. As already emphasised the pairing of species of *Nora* from cabinet specimens can only be provisional speculative and it is equally probable that (i) Vollenhoven's type female is a distinct species or (ii.) the female of *E. ramada*, Moore. It certainly is not the female of *E. bipunctata*, Vollenh. for that species has a female very like the female of *E. merta*, Moore also a *Nora*. The insect that I consider to be the male of *E. indras*, Vollenh. is now described :—

Upperside—Uniform olive-brown with the following markings :—

Forewing, an angulated submarginal series of sagittæ, white outwardly bordered with fuscous, the white becoming obsolescent towards the external angle of the wing ; a series of five white hastate markings internal to the submarginal series but fusing with it in the upper discoidal interspace ; the fuscous lines in and below the cell are arranged as in *E. laverna*, Butl. Hind-wing, a submarginal series of fuscous sagittæ bordered both internally and externally with a shading slightly paler than the ground colour ; markings in the cell as in *E. laverna*, Butl. ; below the costal nervure and occupying the basal costal and basal subcostal interspaces is a distinct patch of blade androconial scales which show up very clearly against the olive-brown of the rest of the wing. *Underside*.—Almost the same as in *E. laverna*, Butl. but less ochreous and the outer border of all the

wings tinged with lilac; on the hind-wing the submarginal sagittæ are much more clearly defined.

The hind-wing is more quadrate than in *E. laverna*, Butl. and the anal angle much more rounded. Expanse 49 mm. (*laverna* 52 mm.).

183. *Euthalia (Nora) indistincta*, Butl.

Nora indistincta, Butler, A. M. N. H. (7) Vol. viii. p. 366, (1901).

Confined to Borneo.

This is yet another species described from a single female specimen. Butler suggests the possibility of this being "the female of an insect which has been regarded as the male of *N. indras* but which is much darker and redder on the under surface, and decidedly larger than the male of that species might be expected to be." The male alluded to by Dr. Butler and compared by me with specimens in the Sarawak Museum is quite a different species from the male just described as the male of *F. indras*, Vollenh. It is much larger, expanding 65 mm., the hind-wing is not so quadrate and the anal angle not pointed; the markings and colouration of the two species are very similar, though in the larger species there is a shading of green at the external angle of the forewing above. The species is even closer to *E. laverna*, Butl. than is *E. indras* ♂ mihi and it might well be a seasonal place of that species. Butler's type female is certainly distinct from the other female *Noras* found in Borneo, but there is no particle of evidence to shew that it is the opposite sex of the male alluded to by Butler.

184. *Euthalia (Nora) bipunctata*, Vollenh.

Adolias bipunctata, Vollenhoven, Tijd. Ent. 1892, p. 191, pl. 10, fig. 5.

From the Malay Peninsula, Borneo and Banka.

There are specimens in the Sarawak Museum agreeing well with Vollenhoven's description and with Distant's figure (Rhop. Malay, pl. XLIII fig. 3.). The female is very like the female of *E. merta* Moore as figured by Distant (l.c. pl. XLIII. fig. 2).

185. *Euthalia (Nora) tanagra*, Staud.

Felderia tanagra, Staudinger, Iris. 1889, p. 76.

Butler (l.c. p. 365) records this species from Borneo as well as from Palawan.

Sub-genus *Sonepisa*.

186. *Euthalia (Sonepisa) Kanda*, Moore.

Adolias Kanda, Moore, Trans. Ent. Soc. Lond. 1859, p. 69, pl. 4, fig. 5.

From Burma, Tenasserim, Malay Peninsula, Borneo, Sumatra.

Sub-genus *Euthalia*.

187. *Euthalia (Euthalia) adonia*, Cr.

Papilio adonia, Cramer, Pap. Exot. III, pl. 255, figs. C. D., (1779).

Sub-sp. *E. adonia whiteheadi*, Grose Smith.

Fruhstorfer considers *whiteheadi* to be a sub-species of *E. lubentina*, Cr. but this is incorrect. Grose Smith associated with his male type the female of another species of this group of *Euthalia*, a species subsequently described by Fruhstorfer as *E. adonia montana*.

The females of these two species have been confused with each other, which after all is not surprising both species occupying the same area viz., Mt. Kina Balu and other mountains in Borneo; *whiteheadi* is however also found, though rarely, in the low-country and the Sarawak Museum collection contains a male and female

caught together, close to Kuching ; the female is very like Distants figure of *Euthalia adonia* ♀ (Rhop. Mal. pl. XIX fig. 11) and there is therefore no doubt that *whiteheadi* is a local race of *adonia*, not of the very different species *lubentina*.

The typical form of *adonia* occurs in Java and Sumatra *whiteheadi* is confined to Borneo, other sub-species are found in the Malay Peninsula, Lombok and Palawan.

188. *Euthalia (Euthalia) adeona*, Gr. Sm. and Kirb.

Euthalia adeona, Grose Smith and Kirby, Rhop. Exot. p. 13, Euth. pl. 4 fig. 5, 6 (1894).

Confined to Borneo.

189. *Euthalia (Euthalia) djata*, Dist.

Euthalia djata, Distant, A. M. N. H. 1889, p. 53.

Confined to Borneo, with a sub-species in Palawan.

190. *Euthalia (Euthalia) lubentina*, Cr.

Papilio lubentina, Cramer, Pap. Exot. II, pl. 155, figs. C. D. (1777).

Sub-sp. *E. lubentina montana*, Fruhst.

Owing to Grose Smith's original error Fruhst. describes as the female of *montana*, the female of *E. whiteheadi* and regard the sub-species as a local race of *E. adonia*, Cr.

The typical form of *lubentina* occurs in India, Ceylon, Burma and the Malay Peninsula, *montana* is found on Bornean mountains and other sub-species in Java, Bawean and the Philippines.

191. *Euthalia (Euthalia) garuda*, Moore.

Adolias garuda, Moore, Cat. Lep. Mus. E.I.C.T. p. 186, pl. 6, figs. 2 and 2A (1859).

Sub-sp. *E. garuda sandakana*, Moore.

The typical form occurs in India to Malay Peninsula, and Sumatra, with sub-species in Borneo and Bawean.

192. *Euthalia (Euthalia) jama*, Feld.

Adolias jama, Felder, Reio. Nov. Lep. III, p. 431 (1866).

Occurs in India, Assam, Burma, Malay Peninsula, Sumatra, Borneo.

193. *Euthalia (Euthalia) euphemia*, Staud.

Euthalia Euphemia, Staudinger, Iris. 1896, p. 238, pl. V. fig. 6.

Confined to Borneo.

194. *Euthalia (Euthalia) apicalis*, Voll.

Adolias apicalis, Vollenhovin, Tijd. v. Entom. 1862, p. 186, pl. 10, fig. 1.

Found in Burma, Tenasserim, Malay Peninsula, Borneo, Sumatra.

195. *Euthalia (Euthalia) aconthea*, Cr.

Papilio aconthea, Cramer, Pap. Exot. II, pl. 134, figs. C. D. (1779).

From Java and Borneo. It will probably be found that the Bornean race is distinct from the Javanese form.

196. *Euthalia (Euthalia) parta*, Moore.

Adolias parta, Moore, Cat. Lep. Mus. E. I. C. T. p. 185, (1857).

Confined to Borneo.

197. *Enthelia (Euthalia) ziceli*, Butl.

Adolias ziceli, Butler, Cist. Ent. T. p. 6, (1869).

From Tenasserim, Malay Peninsula, Borneo.

198. *Euthalia (Euthalia) eriphyle*, de N.

Euthalia eriphyle, de Nicéville, Journ. Bomb. Nat. Hist. Soc. 1891, p. 353, pl. F. fig. 7.

From the Khasias, Tenasserim, Sumatra and Borneo.

The Sarawak Museum collection contains a specimen that I believe to be the female of this species ; it is like the female of *E. parta*, Moore but is smaller and darker in colour.

Pryer and Cator in the British North Borneo Herald 1894 give the following new species of *Euthalia* from N. Borneo :—*E. halimah*, *E. vesta*, *E. abayah*, *E. lakahyah*, *E. borneensis*, no descriptions accompany these names which can now be dismissed as valueless.

Genus *Tanæcia*.

Butler in a recent paper on this genus (A.M.N.H. (7) vol. viii. p. 356, 1901) admits no less than fifteen species from Borneo six of which he describes as new, three being described from single specimens ; I cannot help thinking that this list is far too long a one and that many of the species are mere varietal forms or aberrations. It is impossible however to judge without a careful comparison of the types aided by dissection of the male genital armature, and I quote therefore on Butler's species with one or two slight modifications.

199. *Tanæcia orphne*, Butl.

Tanæcia orphne, Butl. A.M.N.H. 1870, p. 362.

Confined to Borneo. Fruhstorfer considers *T. orphne* to be the male of *T. valmikis*, Feld. but Butler denies this, the British Museum collection containing both sexes of the species.

200. *Tanæcia consanguinea*, Dist.

Tanæcia consanguinea, Distant, Entom. 1866, p. 11.

Confined to Borneo.

201. *Tanæcia lutala*, Moore.

Tanæcia lutala, Moore, Trans. Ent. Soc. Lond. 1859, p. 71, pl. 6, fig. 3.

Confined to Borneo. I believe that all these three species will eventually be proved to be one and the same.

202. *Tanæcia subochrea*, Butl.

Tanæcia subochrea, Butler, A.M.N.H. (7) vol. viii. p. 363. (1901).

Confined to Borneo. Very doubtfully distinct from *T. lutala*.

203. *Tanæcia margarita*, Butl.

Tanæcia margarita, Butler, A.M.N.H. (7) vol. viii. p. 363 (1901).

Confined to Borneo.

204. *Tanæcia valmikis*, Feld.

Adolias valmikis, Felder, Reise Nov. Lep. III. p. 434 (1867).

Confined to Borneo with a sub-species in Nias.

205. *Tanæcia apsarasa*, Voll.

Adolias apsarasa, Vollenhoven, Tijd. Ent. 1862, p. 198, pl. 11, fig. 3.

Forma typica, in South Borneo.

Sub-sp. *T. apsarasa munda*, Fruhst. in North Borneo.

Sub-sp. *T. apsarasa martigena*, Weym. in Sumatra.

206. *Tanæcia fröhstorfferi*, Butl.

Tanæcia fröhstorfferi, Butler, A.M.N.H. (7) vol. viii p. 361 (1901).

Confined to Borneo. This and the next two species appear to be nothing but varietal forms of *T. apsarasa*.

207. *Tanacia evanescens*, Butl.

Tanacia evanescens, Butler, A.M.N.H. (7) vol. viii. p. 361, (1901.)

Confined to Borneo (Labuan).

208. *Tanacia albifasciata*, Butl.

Tanacia albifasciata, Butler A.M.N.H. (7) vol. viii. p. 361, 1901.)

Confined to Borneo.

209. *Tanacia pelea*, Fab.

Papilio pelea, Fabricius, Mant. Ins. p. 53, (1787).

Sub-sp. *T. pelea crowleyi*, Butl.

The typical form occurs in Malay Peninsula, Singapore, Billiton *crowleyi* is confined to Borneo, other sub-species are found in Java, Lombok and (?) Sumatra.

210. *Tanacia clathrata*, Voll.

Adolias clathrata, Vollenhoven, Tijd. v. Ent. p. 205, pl. 12 fig. 5 (1862).

Forma typica, Borneo, low-country.

Sub-sp. *T. clathrata cærulescens*, Grose-Smith—Borneo, Mountains.

Sub-sp. *T. clathrata nicévillei*, Dist.—Malay Peninsula, Sumatra.

The form *cærulescens* is quite abundant on Mts. Matang and Santubong, Sarawak, whereas in the low-country the typical form abounds; a pair of the latter taken *in coitu* are in the Sarawak Museum collection.

Fruhstorfer suggests that *Tanacia varuna*, Voll. recorded originally from Java occurs in Borneo only.

Sub-genus *Passirona*.211. *Tanæcia (Passirona) amisa*, Grose-Smith.*Euthalia amisa*, Grose-Smith, A.M.N.H. 1889, p. 315.

From Mt. Kina Balu, North Borneo.

Genus *Vanessa*.212. *Vanessa canace*, Joh.*Papilio canace*, Johanssen, Amœn. Acad. vi. p. 406 (1764).Sub-sp. *V. canace perakana*, Dist.The typical form occurs in the Indian region, *perakana* is found in the Malay Peninsula, Java and Sumatra and other sub-species in Sumatra, Luzon, Japan, Corea.Genus *Rhinopæpa*.213. *Rhinopæpa polynice*, Cr.*Papilio polynice*, Cramer, Pap. Exot. III. pl. 195 fig. D. E. (1780).

From Malay Peninsula, Sumatra and Borneo with sub-species in Burma, Assam, Java, Nias and Luzon.

Genus *Symbrenthia*.214. *Symbrenthia hippoclaus*, Cr.*Papilio hippoclaus*, Cramer Pap. Exot. III. p. 46, pl. 220, fig. C. D. (1779).Sub-sp. *S. hippoclaus marius*, Fruhst.The typical form is confined to Amboina, *marius* to Borneo, other sub-sp. occur in Sikkim, Siam, Tonkin, Assam, China, Philippines, Java, Sumatra, Lesser Sunda Is., Celebes, Moluccas, New Guinea and adjacent isles.

215. *Symbrenthia hypselis*, Godt.

Vanessa hypselis, Godart, Enc. Méth. ix. Suppl. p. 818 (1823).

Sub-sp. *S. hypselis balunda*, Staud.

This sub-species occurs on Borneo mountains, other races occur in Java (typical form), Sumatra, Malay Peninsula, Nias, Palawan, Khasia, Himalayas, Assam, Burma, Tenasserim.

216. *Symbrenthia hypatia*, Wall.

Laogona hypatia, Wall.

Sub-sp. *S. hypatia hippocrene*, Staud.

This sub-species is found in Borneo, the typical form was described from Java and another sub-species occurs in the Malay Peninsula and Sumatra.

[The species of the genus *Symbrenthia* mimic the yellow and black *Neptides*; they fly in the same jerky manner with the wings held out quite flat so as to display to the best advantage the colouring of the upper surfaces.]

Genus *Cyrestis*.

217. *Cyrestis nivea*, Zink.—Somm.

Amathusia nivea, Zinken—Sommer, Nova. Acta. Acad. N.C. 1831 p. 138, pl. 14, fig. 1.

Sub-sp. *C. nivea nivalis*, Feld.

The typical form occurs in Java, sub-species in Burma, Tenasserim, Malay Peninsula, Sumatra, Borneo, and Sumba.

218. *Cyrestis seminigra*, Grose Smith.

Cyrestis seminigra Grose. Smith, A.M.N.H. 1889, p. 313.

Confined to Borneo.

219. *Cyrestis cocles*, Fab.

Papilio cocles, Fabricius, Mant. Ins. ii. p. 7, (1787).

Sub-sp. *C. cocles sericens*, Butl.

The typical form occurs in the Indian region to Malay Peninsula other sub-species occur in Indo-China, Andamans and Borneo (*sericens*).

220. *Cyrestis theresæ*, de N.

Cyrestis theresæ, de Nicéville, Journ. As. Soc. Bengal, 1894, p. 18, pl. 5 fig. 8.

From Sumatra and Borneo.

221. *Cyrestis neela*, Swinh.

Cyrestis neela, Swinhoe, A.M.N.H. (6) xiv. p. 430 (1894).

From N. Borneo. This may be synonymous with the preceding species.

Sub-genus *Chersonesia*.

222. *Cyrestis (Chersonesia) rahria*, Moore.

Cyrestis rahria, Moore, Cat. Lep. Mu. E.I.C. i. p. 147, pl. 3A fig. 2, (1857).

The species occurs in the Malay Peninsula, Great Sunda Is. Nias with sub-species in Burma and Tenasserim Celebes and Sula Is. The species is extremely variable in size.

223. *Cyrestis (Chersonesia) peraka*, Dist.

Chersonesia peraka, Distant, A.M.N.H. 1884, p. 199.

From Tenasserim, Malay Peninsula, Sumatra and Borneo.

Genus *Kallima*.

224. *Kallima inachus*, Boisd.

Paphia inachus, Boisduval, Crochard's Edit. Cur. Rég. Anim. Ins. ii. pl. 139, f. 3, (1836).

Sub-sp. *K. inachus buxtoni*, Moore.

Fruhstorfer (Berl. ent. Zeitschr. XLIII. 1898 p. 193) divides this species into twelve local races occurring in the Indian region Chira, Japan, Malay Peninsula, Sumatra, Borneo and Nias; *buxtoni* is confined to Borneo and Nias. The species is very rare in Borneo.

Genus *Doleschallia*.

225. *Doleschallia bisaltide*, Cr.

Papilio bisaltide, Cramer, Pap. Exot. ii. pl. 102, fig. C. D. (1779).

Sub-sp. *D. bisaltide borneensis*, Fruhst.

Fruhstorfer (l.c. XLIV. 1899 p. 27A) divides the species into seventeen local races of which *borneensis* is confined to Borneo; other sub-species occur in India, Ceylon, Tenasserim, Malay Peninsula, Great and Lesser Sunda Is., Celebes, Moluccas, New Hebrides, Viti, Guadalcanar, Philippines.

Genus *Eulepis*.

226. *Eulepis schreiber*, Godt.

Nymphalis schreiber, Godart, Enc. Méth IX. Suppl. p. 825, (1823).

Sub-sp. *E. schreiber malayicus*, Roths.

This race is found in Borneo, Sumatra, Malay Peninsula, Banca, Billiton; other races occur in India, Assam, Burma, Java, Nias, Luzon.

227. *Eulepis hebe*, Butl.

Charaxes hebe, Butler, P.Z.S. p. 634, n. 46, pl. 37, f. 39, (1865).

Sub-sp. *E. hebe ganymedes*, Staud.

The species ranges from the Malay Peninsula through the great and Lesser Sunda Is. ; *ganymedes* is confined to Borneo.

228. *Eulepis moori*, Dist.

Charaxes moori, Distant, Rhop. Mal. p. 108, n. 6, pl. 13, f. 3, (1883).

Sub-sp. *E. moori heracles*, Röber.

From Assam, Burma, Malay Peninsula, Sumatra, Nias, Natuna Is. Borneo (*heracles*) Java.

It is practically certain that the sub-species *E. moori sandakanus* does *not* occur in Borneo (of *Novitates Zoologicae* VI. p. 243, 1899).

229. *Eulepis athamas*, Drury.

Papilio athamas, Drury, lu. Ex. lus. I. p. 5. pl. 2 f. 4 (1773).

Sub-sp. *E. athamas wieus*, Rothschr.

From Sumatra, Borneo and Natuna Is., with other races in India region, Indo-China, S. China, Malay Peninsula, Java, Philippines, Palawan, Timor.

230. *Eulepis jalysus*, Feld.

Charaxes jalysus, Felder, Reis. Nov. Lep. p. 438, pl. 59 f. 5, (1867).

From Burma to Borneo and Sumatra.

231. *Eulepis delphis*, Doubl.

Charaxes delphis, Doubleday, Ann. Soc. Ent. France (2) I. p. 217, pl. 7, (1843).

Sub-sp. *E. delphis concha*, Vollenh.

The species occurs in Assam (forma *typica*), Burma to Sumatra (*concha*), Java (*cygnus*), Palawan (*niveus*)

Fruhstorfer regards the Bornean representatives as yet another race (*delphinion*).

Genus *Charaxes*.

232. *Charaxes durnfordi*, Dist.

Charaxes durnfordi, Distant, Entom. XVII. p. 191, (1884).

Sub-sp. *C. durnfordi everetti*, Roths.

The female of this sub-species is now described for the first time :—

♀ *Upperside* much paler than in the male ; forewing, the discal white markings enlarged, the cell closed by a double dark line, the sub-marginal white sagittæ much larger than in the male ; hind-wing, the sub-marginal ocelli are not completely encircled by a whitish ring as in the male, as outwardly the “iris” of each ocellus merges in the heavy brown marginal line, the “pupil” of the innermost ocellus is suffused with blue.

Underside very much paler than in the male, median interspaces deep brown.

Expanse 110 mm ; length of outer tail 8 mm.

Hab. Kuching ; taken in a trap baited with rotten bananas.

The species occurs in Burma, Tenasserim, Malay Peninsula and Great Sunda, Is., *everetti* is confined to Borneo.

233. *Charaxes distanti*, Honr.

Charaxes distanti, Honrath, Berl. Ent. Zeitschr. XXIX. p. 277, (1885).

Tenasserim, Malay Peninsula, Natunas, Borneo, Sumatra.

234. *Charaxes polyxena*, Cr.

Papilio polyxena, Cramer, Pap. Exot. I. p. 85, pl. 54, fig. A. B. (1775).

Sub-sp. *C. polyxena repetitus*, Butl.

Indian region, China, Malay Peninsula, Sumatra, Banka, Billiton, Borneo, Java, Nias, Palawan.

235. *Charaxes harmodius*, Feld.

Charaxes harmodius, Felder, Reis. Nov. Lep. p. 445, (1867).

Sub-sp. *C. harmodius infernus*, Rothschr.

Java, Sumatra, Palawan, Borneo (*infernus*).

236. *Charaxes borneensis*, Butl.

Charaxes borneensis, Butler, Lep. Exot. p. 16, pl. 6, fig. 2 (1869).

Malay Peninsula, Sumatra and Borneo.

237. *Charaxes fabius*, Fab.

Papilio fabius, Fabricius, Spec. Ins. II. p. 12, (1782).

Sub-sp. *C. fabius echo*, Butl.

This sub-species is found in the Malay, Peninsula, Sumatra and Borneo. Other sub-species occur in India, Ceylon, Tenasserim, Burma, Philippines, Sula Is., Celebes.

Genus *Prothoë*.238. *Prothoë calydonia*, Hew.

Nymphalis calydonia, Hewitson, Exot. Butl. i. p. 86, pl. 43, fig. 3, 4, (1855).

Malay Peninsula, Sumatra, Borneo.

There are four species in the Sarawak Museum, all taken in traps baited with rotten fruit.

239. *Prothoë francki*, Godt.

Nymphalis francki, Godart. Enc. Méth. IX. Suppl. p. 825, (1823).

Sub-sp. *P. francki angelica*, Butl.

Angelica occurs in Tenasserim, Malay Peninsula, Borneo, Sumatra, and Billiton; other sub-species are found in Java, Banca, Nias, Palawan and Philippines.

Fam. LEMONIIDAE.

Sub-fam. LIBYTHAEINAE.

Genus *Libythaea*.

240. *Libythaea myrrha*, Godt.

Libythaea myrrha, Godart, Enc. Méth. ix. p. 171, (1819).

This occurs in the Great and Lesser Sunda Is., with sub-species in India, Ceylon and Malay Peninsula.

The species is not found in S. Borneo at all, but is apparently not uncommon in the North.

Sub-fam. NEMEOBIINAE.

Genus *Zemeros*.

241. *Zemeros flegyas*, Cr.

Papilio flegyas, Cramer, Pap. Exot. III. pl 280, figs. E.F. (1872).

Sub-sp. *Z. flegyas albipunctata*, Butl.

This sub-species is found in the Malay Peninsula, Sumatra and Borneo, other races occur in Indo-China, Tenasserim, Burma, Siam, China, Java, Nias.

242. *Zemeros emesoides*, Feld.

Zemeros emesoides, Felder, Wien. Ent. Mon. IV. p. 396, (1860).

Sub-sp. *Z. emesioides eso*, Fruhst.

This Bornean race is separated by Fruhstorfer from the typical form which flies in the Malay Peninsula and Sumatra.

Genus *Dodona*.

243. *Dodona deodata*, Hew.

Dodona deodata, Hewitson, Entom. Month. Mag. xiii. p. 151, (1876).

Sub-sp. *D. deodata pryeri*, Moore.

The sub-species occurs in Borneo, the typical form in Burma.

244 *Dodona elvira*, Staud.

Dodona elvira, Staudinger, Deuts. Ent. Zeitschr. 1896, p. 239, pl. 5, fig. 6, ♂. Shelford, Journ. As. Soc. Straits Br. No. 33 p. 258 ♀.

Confined to Borneo. A female aberration from Kina Balu is termed by Fruhstorfer ab. *pura*.

Genus *Taxila*.

245. *Taxila thuisto*, Hew.

Taxila thuisto, Hewitson, Exot. Butl. ii. Tax. pl. 1. figs. 5, 6, (1861).

In Burma, Tenasserim, Malay Peninsula, Sumatra, Borneo.

246. *Taxila haquinus*, Fab.

Papilio haquinus, Fabricius, Ent. Syst. iii. p. 55, (1793).

Malay Peninsula, Java, Borneo, Burma, Tenasserim, Siam, Mergui Archipelago, Palawan.

247. *Taxila zemara*, Butl.

Abisara zemera, Butler, A.M.N.H. 1870, p. 363
Borneo.

Fruhstorfer regards this as the local race of *T. haquinus*; the two species—as I prefer to regard them—fly together, though *zemara* is much the rarer of the two; the females are quite different from each other, the yellow apical fascia being a salient feature of *zemara* ♀, whilst the blue markings on the underside are larger.

Genus *Laxita*.248. *Laxita orphna*, Boisd.

Emesis orphna, Boisduval, Spéc. Gén. Lép. i. pl. 21, fig. 4, (1836).

Sumatra and Borneo with a sub-species in the Malay Peninsula.

249. *Laxita teneta*, Hew.

Taxila teneta, Hewitson, Exot. Butl. ii. Tax. pl. 1, figs. 3, 4, (1861).

Borneo.

Fruhstorfer refers this to the genus *Taxila*.

250. *Laxita telesia*, Hew.

Taxita telesia, Hewitson, Exot. Butl. ii. Tax. pl. 1, figs. 1, 2, (1861).

The typical form occurs in Borneo and on Mt. Kina there is a distinct race:—Sub-sp. *L. telesia ines*, Fruhst.; a second sub-species occurs in the Malay Peninsula and Sumatra.

251. *Laxita nicevillei*, Röber.

Laxita nicevillei, Röber, Ent. Nachr. No. 10, p. 149, 1895.
Borneo.

The species which appears to be known only from females is unknown to me.

252. *Laxita damajanti*, Feld.

Abisara damajanti, Feider, Wien. Ent. Monat. iv. p. 397, (1860).

Sub-sp. *L. damajanti tola*. de N.

The typical form occurs in the Malay Peninsula and Sumatra, the sub-species in Borneo.

253. *Laxita hewitsonii*, Röber.

Laxita hewitsonii, Röber, Ent. Nach. No. 10, p. 150, (1895).

Borneo.

Genus *Sospita*.

254. *Sospita savitri*, Feld.

Abisara savitri, Felder, Wien. Ent. Monat. iv. p. 397, (1860).

Sub-sp. *S. savitri sciurus*, Fruhst.

Sub-sp. *S. savitri strix*, Fruhst.

The first of these two sub-species occurs in the low-country of Borneo, the second on Mt. Kina Balu. The typical form occurs in the Malay Peninsula.

Genus *Abisara*.

255. *Abisara Kausambi*, Feld.

Abisara Kausambi, Felder, Wien. Entom. Monats. iv. p. 397, (1860).

Tenasserim, Malay Peninsula, Sumatra, Borneo with sub-species in Nias, Palawan, Java.

256. *Abisara Kausamboides*, de N.

Abisara Kausamboides, de Nicéville, Journ. As. Soc. Beng. 1895, p. 442.

Sub-sp. *A. Kausamboides teru*, Fruhst.

The sub-species is confined to Borneo, other races occur in the Malay Peninsula, Sumatra, Nias, Java.